

Date: Tue, 22 Jun 93 03:00:22 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #761  
To: Info-Hams

Info-Hams Digest                      Tue, 22 Jun 93                      Volume 93 : Issue 761

Today's Topics:

    [ANS] Wanted: Simple,Cheap,2m antenna project  
    Apollo & hams (was Re: "If you believe they put a man on the moo  
        Are we losing our technical abilities?  
            Broadcast IDs  
                Making home HAM Friendly  
                OE's 3000A Handi-Counter Review  
                Poor Operating Practice By 5A0RR  
                STS-57 Post Launch Element Set  
    TV vs Cable. Why Pay for a FREE Signal (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 21 Jun 1993 21:45:05 GMT  
From: valinor.mythical.com!n5ial!jim@uunet.uu.net  
Subject: [ANS] Wanted: Simple,Cheap,2m antenna project  
To: info-hams@ucsd.edu

In article <9306202222.AA02949@tecnet1.jcte.jcs.mil>  
jdelancy@tecnet1.jcte.jcs.mil writes:

[Someone else wrote:]

>> Name hr is Swami (in Kingston, RI). I want to know if anyone has  
>> plans for building a simple cheap 2m beam, or quad etc.

>Define "cheap". If fifty bucks falls in that category, wonder  
>down to you local rip-off-shack (Radio Shack) and get there

>super-duper scanner antenna that also works on the ham bands  
>of 144, 220, 440, 900, and 1200. Hasn't got the gain of a beam  
>but it "cheap" and simple.

I wouldn't call \$50 cheap for something like that.... In fact, I'd personally say that the above is a pretty expensive suggestion, especially considering that the performance isn't likely to be very good at all.

I built a 2m beam (5 element ... I didn't have much room) for around \$15, and it only cost that much because the only places I had available to get supplies from at the time were severely overpriced.

Besides, if you're going to go for something like a Radio Shaft scanner antenna, why not just make a simple vertical or hang a dipole vertically? After all, everyone here knows how to make a simple dipole, and they're *\*REALLY\** cheap...and either one would probably out-perform the Radio Shaft antenna by a pretty significant amount.

What you want to do is get a copy of ``The ARRL Antenna Book'' (you should have a copy of this most valuable book ... if you don't, drop everything right now and go buy it!). In this book, you will find all sorts of antennas designs, including yagis, quads, quagis, verticals, J-poles, and just about anything else you can imagine.

If I remember correctly, the designs for the beams use lengths in terms of wavelengths, and not as absolute values, so you'll need to understand how to convert to/from this, but then, if you've got your license, you already have a good, solid understanding of how to do this (or else you would have failed the test). And even if it's been a long, long time, and you've forgotten, the Antenna Book has a section that will remind you. :-)

Also, when looking for the Antenna Book, if you happen to find a copy of an older issue (particularly the one from around 1981, with the blue cover), grab it fast! From what I've seen between my old issue and my newer one (ca. 1992), even though the new one is a lot thicker, it seems to leave out a lot of the details and theory that the older issues had. I still go to my old copy far more often than the new one when looking for ideas.

Suggestions for (cheap) materials:

- \* ) boom: thick (e.g., 3/4 inch or 1 inch) wooden dowel from your local hardware store (building supply stores are often cheaper)
- \* ) elements: whatever you can get that's around the right length... You should be able to find stainless steel rods in more or less the same spot in the store where you found the wooden dowels. If you ask nicely, they'll probably cut them to length for you for free.

If you're thinking about a quad or quagi, I'd get some moderately thin copper tubing (this \*ISN'T\* as cheap, but it shouldn't be too bad). I say moderately thin, because the thicker copper tubing is a b\*tch to solder with a normal low-wattage iron (all I have is a tiny 15 watt iron that's meant for working with fairly dense printed circuits). If you've got the right size iron (or torch/whatever), you might want to go for heavier tubing, both for a more broadbanded antenna and for stability.

I was looking for something with a relatively fast setup/teardown time, so I used alligator clips to connect the coax to the driven element. Not a great solution, and certainly not one I'd use on anything except an antenna that was meant to be ripped apart and made portable, but it turned out to work rather nicely (relatively speaking, of course).

--jim

--

#include <std\_disclaimer.h>

73 DE N5IAL (/4)

-----  
INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W  
AMATEUR RADIO: (packet station temporarily offline) AMTOR SELCAL: NIAL  
-----

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

-----  
Date: 22 Jun 1993 04:09:58 GMT

From: usc!cs.utexas.edu!uwm.edu!rpi!clotho.acm.rpi.edu!strider@network.UCSD.EDU

Subject: Apollo & hams (was Re: "If you believe they put a man on the moo

To: info-hams@ucsd.edu

In article <g8Hc6B1w165w@earldom.UUCP> jre@earldom.UUCP (Jim Earl) writes:  
>lehane@sni.co.uk (Lehane Kellet) writes:

>

>

>But how do you know that the signals aren't coming from a satellite that  
>orbits the earth at the same orbit as the moon?

>

Well, let's see, where would a satellite be that orbited the earth at the same orbit as the moon. Hmm, it'd be ON/IN the moon. Gee, we might as well go there.

>Now, if someone had a super power telescope, maybe they could see the flag  
>we left there (if it is still standing).

>

Funny you mentioned that. When I was younger, I wanted a telescope just for that reason. I've been meaning to do the math to see if anything could see any sign of the Apollo landings on the moon, like the LEM base,

which would be the largest thing (perhaps one of the SV-III stages that was crashed as I recall?)

As I recall, they can't be seen from earth.

Once on a talk show I saw a guy who doubted the moon landings. He asked why we didn't bother bringing a couple hundred pounds of a dark powder, like graphite, and spread it in a pattern (like the letters NASA or US I suppose) on the moon. Even at that young age ( I think I was 12 or so (but my gf says I seem to ahve done everything at 12)) I could come up with a half dozen reasons not to. But, thanks to Henry's point about the albedo, I'm even more convinced it was a stupid idea.

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>-----
>(916) 729-6825          Jim Earl - KB6KCP          (916) 929-0300 x233
>   (home)          earldom!jre@csusac.ecs.csus.edu          (work)
>                                     csusac!earldom!jre
```

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-----
Date: Mon, 21 Jun 1993 21:13:48 +0000
From: pipex!bnr.co.uk!demon!llondel.demon.co.uk!dave@uunet.uu.net
Subject: Are we losing our technical abilities?
To: info-hams@ucsd.edu
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Although the UK has a different licence structure to the US, it is interesting to note that we also have an ongoing debate (via packet radio) on the subject of standards..... While the UK exam questions are not published in advance (the examining body even tries to restrict their circulation by collecting \*all\* the exam papers back afterwards), being multiple choice (aka 'vote for Joe') does make them a lot easier than the old written exam which went out in the late 1970s. (Yes, I did do the 'easy' exam.)

I have never understood the American system of publishing the entire question pool in advance - or are there so many possible questions that you \*can't\* learn all the answers? I wish my University finals were published in advance - would have been a \*lot\* easier :-)

Bring back some technical requirement to amateur radio world-wide. We have the allocations because we are supposed to use them for self-training and (hopefully) some serious experimentation. If the various administrations around the world see amateur radio turning into a glorified CB then that might be all we get left with after the commercial concerns have swiped our bands.

Dave

\*\*\*\*\*

\* G4WRW @ GB7WRW.#41.GBR.EU AX25 \* You think \*you\* have problems? \*  
\* dave@llondel.demon.co.uk Internet \* What do you do if you \*are\* \*  
\* g4w1w@g4w1w.ampr.org Amprnet \* a manically depressed robot?? \*  
\*\*\*\*\*

-----  
Date: Tue, 22 Jun 1993 03:26:41 GMT  
From: swrinde!gatech!kd4nc!n4tii@network.UCSD.EDU  
Subject: Broadcast IDs  
To: info-hams@ucsd.edu

martinbw@jackatak.raider.net (Bruce Martin) writes:

>When I was in college our station ID was:

>With less power than an ordinary lightbulb WTTU-FM, Cookville, Tennessee

>We were using a 10 watt transmitter with a gain antenna that gave us an  
>effected radiated power of 22.5 watts (this was mentioned in our end of  
>broadcast day transmission).

When I was at Southern Tech in Marietta, GA, I had a show at their college  
station... I was required to ID basically once an hour somewhere around  
the hour....

My ID would consist of "This is WGHR, 102.5 FM, Marietta, GA...the voice  
of Southern Tech.

Sometimes if I wanted to get really cool, I'd say something to the effect  
of "From the top of the Admin Building, with a cool 10 million Microwatts,  
this is WGHR, 102.5 FM - Marietta - The Voice of SOUTHERN TECH."

I hope I got the SI unit conversion right...10 million uW = 10w, right?

We were actually 16w ERP...had a 4 bay B&W circular pole array...and we  
were the ONLY station on the FM band in Metro Atlanta that still was in  
MONO!!!!

John  
n4tii%kd4nc.uucp@gatech.edu

>\*\*\*\*\*  
>\* Bruce W. Martin Internet: martinbw@jackatak.raidernet.com \*  
>\* 4558 Brooke Valley Dr. AOL: Dragon16 \*  
>\* Hermitage TN 37076-2650 HAM Call: KQ4TV \*  
>\* Voice: (615) 872-9942 Work: (615) 244-2022 \*

>\* FAX/MODEM: (615) 885-4182 \*

>\*\*\*\*\*

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Date: Tue, 22 Jun 1993 09:52:46 GMT  
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!hpscit.sc.hp.com!hplextra!hplb!  
hpwin052!hpqmoea!dstock@network.UCSD.EDU  
Subject: Making home HAM Friendly  
To: info-hams@ucsd.edu

Julian Macassey (julian@bongo.tele.com) wrote:

: They drive into the local car wash where they pay \$5-7 to have  
: the car machine washed and vacuumed and dried by wetbacks who speak  
: no English.

: While waiting for their car to be washed, drivers get to buy  
: tacky car accessories like car air fresheners and bumper stickers.  
: Many car washes also have a shoe shine service.

Thanks, Julian, I was just curious. I thought that in California they  
would be required to recycle 100% of the water, or that there was some  
environmental legislation requiring glass-bead blasting to be used in  
future in the pipeline. Low tech manual (manuel?) labour doesn't fit the  
high-tech image.

For those who do wash their cars at home, under the area used is a  
superb place for ground (earth) rods.

Cheers

David

You forgot about them having to endure " Have a Nice day"

-----  
Date: 22 Jun 93 00:07:29 GMT  
From: olivea!isc-br!tau-ceti!comtch!opus-ovh!bmork@uunet.uu.net  
Subject: OE's 3000A Handi-Counter Review  
To: info-hams@ucsd.edu

crisp@netcom.com (Richard Crisp) writes:

> >50 ohm position. The 50 ohm inputs (with associated visual bar graph)  
> >handle a maximum of +15dBm, limited by the MAR6 amplifier. That's only

> >31.7 mW, or 39.8mV in a 50-ohm system. However, if this is true, why is  
> ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Yes. That should read "...+15dBm. That's only 1.2 volts RMS in a  
50 ohm system..."

After I complete a few tests tonight, I'll post a revised version. I  
found a Good Guy at OE this morning and he pointed out a few things.  
In the interum, note the above and the following:

The 1-200MHz input in their sales lit is non-existent. It's a typo.

The second to last paragraph gets bogged down in dBm, dB, dBmv, etc.  
The critical numbers are: Sensitivity -57dBm to -11dBm, input limited  
to +15dBm. This makes a \*lot\* more sense.  
The 3GHz input is spec'd at -11dBm. Mine at 2GHz is -43dBm (much  
better). Spot checks of each 50-ohm amp show they match or exceed  
specs at each frequency checked.

THANK YOU for the feedback. I miss the capability for peer review  
I used to have back in the academic world. When it's only me and my  
electronic bench, I go bug-eyed after the third proof read.

---

Brian Mork Internet bmork@opus-ovh.spk.wa.us  
. . . . Amateur Radio ka9snf@wb7nnf.#spokn.wa.usa  
.. . . USMail 6006-B Eaker, Fairchild, WA 99011

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Date: Tue, 22 Jun 93 06:14:13 GMT  
From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!news.dfn.de!  
hpux.rz.uni-jena.de!news.tu-ilmenau.de!systemtechnik.tu-ilmenau.de!  
tom@network.UCSD.EDU  
Subject: Poor Operating Practice By 5A0RR  
To: info-hams@ucsd.edu

In article <204u40\$ioe@jericho.mc.com>, levine@mc.com (Bob Levine) writes:  
|> In article 2836@es.dupont.com, collinst@esvx19.es.dupont.com (Thomas Collins  
WI3P) writes:

|> > On the evening of 6/17 at about 0300Z 5A0RR came up on 14.195Mhz.  
|> > He talked to a few stations he had a schedule with then all Hell  
|> > broke loose. He started split frequency operation calling on  
|> > 14.195 and listening 14.200 - 14.300.>  
|> > Needless to say the thousands of stations in the US and overseas  
|> > wiped out 20 meters from 14.150 - 14.300. There were several nets,  
|> > one on one QSOs and SSTV QSOs going on. But all of these were  
|> > drowned out by the inconsiderate DXers who didn't listen to a frequency





the orbit adjust burn scheduled at 22:28 MET. Thus, this set will be good for SAREX operations between MET 22:28 and the next burn which occurs at 1/4:42.

STS-57

```
1 22684U 93 37 A 93173.50632641 .00001741 00000-0 33077-4 0 59
2 22684 28.4598 306.8200 0046929 52.8257 307.6655 15.43627151 162
```

Satellite: STS-57

Catalog number: 22684

Epoch time: 93173.50632641 = (22 JUN 93 12:09:06.60 UTC)

Element set: 005

Inclination: 28.4598 deg

RA of node: 306.8200 deg

Space Shuttle Flight STS-57

Eccentricity: .0046929

Keplerian Element set JSC-005

Arg of perigee: 52.8257 deg

from predicted flight Day 2 vector

Mean anomaly: 307.6655 deg

Mean motion: 15.43627151 rev/day

G. L. Carman

Decay rate: 1.741e-05 rev/day^2

NASA Johnson Space Center

Epoch rev: 16

Checksum: 299

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

/EX

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Date: 22 Jun 93 05:04:00 GMT

From: news-mail-gateway@ucsd.edu

Subject: TV vs Cable. Why Pay for a FREE Signal

To: info-hams@ucsd.edu

>Cable subscribers are \*already\* paying for what others receive for  
>free. It's in the basic cable charge. The only question is whether  
>local broadcasters should get a cut just like the non-broadcast and  
>"superstation" originators do. Right now the cable companies have a  
>free ride on the programming costs absorbed by the broadcaster while  
>"pirating" away his broadcast audience and charging \*them\* for it.

Broadcasters get their profits by charging advertisers for their air-time.  
Why should he care if the viewer gets him directly off-air or if he gets  
it by plugging in a cable? As long as the viewer is counted by the Neilsens  
or whoever counts viewers the broadcaster is going to get the same money.

If a viewer doesn't want to pay the cable company for a local station he

just has to buy an antenna. The viewer/cable customer pays the cable co. to get the convenience of not having to worry about lighting on a tower or rotating an antenna or to get the better signal from the top of a tall tower. He also is paying to get the extra service of all the other "cable" channels like USA, Discovery, A&E, etc. This includes WTBS and WGN for the people outside of the local listening area.

Mike Ley, N9GQU

-----  
Date: Tue, 22 Jun 1993 07:19:19 GMT  
From: usc!howland.reston.ans.net!agate!news.ucdavis.edu!othello.ucdavis.edu!  
ez006683@network.UCSD.EDU  
Subject: TV vs Cable. Why Pay for a FREE Signal  
To: info-hams@ucsd.edu

James P. Ley (LEY@UWSTOUT.EDU) wrote:  
: Broadcasters get their profits by charging advertisers for their air-time.  
: Why should he care if the viewer gets him directly off-air or if he gets  
: it by plugging in a cable? As long as the viewer is counted by the Neilsens  
: or whoever counts viewers the broadcaster is going to get the same money.

It is sad but true, the cable channels also run commercials, I hate the topsy tail. The broadcast stations add value to the cable company, therefore they should get some money for the service they provide. that arguement is like saying that since the theatres make lots of money selling milkduds and ju-ju fruits and the studios make lots of money by endorsing products therefore we should get into movies for free. What if you created a nifty windows program in your spare time and suddenly Microsoft started including it as part of the Windows 6.7 bundle. Hey you had already developed it and had a job to pay your bills during development, why do you want to get paid for it?

Dan

--

\*-----\*  
\* Daniel D. Todd           Packet: KC6UUD@WA6RDH.#nocal.ca.usa           \*  
\*                           Internet: DDTODD@ucdavis.edu                \*  
\*                           Snail Mail: 1750 Hanover #102               \*  
\*                           Davis CA 95616                            \*  
\*-----\*  
\*           I do not speak for the University of California....       \*  
\*           and it sure as hell doesn't speak for me!!               \*  
\*-----\*

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Date: Mon, 21 Jun 1993 20:57:17 +0000  
From: pipex!bnr.co.uk!demon!llondel.demon.co.uk!dave@uunet.uu.net  
To: info-hams@ucsd.edu

References <m1f1tmINNrn3@exodus.Eng.Sun.COM>, <2332@indep1.UUCP>,  
<1vnm27INNaob@network.ucsd.edu>  
Reply-To : dave@llondel.demon.co.uk  
Subject : Re: Ham radio in TV shows

In article <1vnm27INNaob@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:

>  
> The sign of a real techno-nurd is one who lets these minor inconsistencies  
> BOTHER him. It's not important. Relax and enjoy the show.  
>  
The first time you watch something just enjoy it.... second time you can spot where natural laws have been suspended or special effects weren't quite so special.....

At risk of being grabbed by the Klingons, try watching the original Star Trek stuff with a cynical eye and see what you notice :-)

Dave

\*\*\*\*\*  
\* G4WRW @ GB7WRW.#41.GBR.EU AX25 \* You think \*you\* have problems? \*  
\* dave@llondel.demon.co.uk Internet \* What do you do if you \*are\* \*  
\* g4wrw@g4wrw.ampr.org Amprnet \* a manically depressed robot?? \*  
\*\*\*\*\*

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Date: Tue, 22 Jun 93 01:06:31 -0500  
From: swrinde!gatech!usenet.ins.cwru.edu!wariat.org!wariat.org!dreaml!  
jga@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <C8z5s1.Jq5@hpqmoea.sqf.hp.com>, <beerb.18.0@ccmail.dayton.saic.com>,  
<1993Jun21.175015.18872@bongo.tele.com>  
Subject : Re: Making home HAM Friendly

> They drive into the local car wash where they pay \$5-7 to have  
>the car machine washed and vacuumed and dried by wetbacks who speak  
>no English.

> While waiting for their car to be washed, drivers get to buy  
>tacky car accessories like car air fresheners and bumper stickers.  
>Many car washes also have a shoe shine service.

>Obhamradio: Remember to remove your roof antenna before entering the  
>car wash, so the machine won't take it off for you.

And this has to do with making a home Ham Friendly in such a way that....

-j

--

Jon Anhold N8USK                      Dreamland Network Systems  
(jga@dreaml.wariat.org)                      Cleveland, Ohio  
(n8usk@n8jnr.#neoh.oh.usa.noam)                      44116

-----  
Date: Tue, 22 Jun 1993 07:45:56 GMT  
From: usc!howland.reston.ans.net!agate!news.ucdavis.edu!othello.ucdavis.edu!  
ez006683@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <beerb.18.0@ccmail.dayton.saic.com>,  
<1993Jun21.175015.18872@bongo.tele.com>, <HVoJsAeKBh107h@dreaml.wariat.org>  
Subject : Re: Making home HAM Friendly

Jon Anhold (jga@dreaml.wariat.org) wrote:

: > They drive into the local car wash where they pay \$5-7 to have  
: >the car machine washed and vacuumed and dried by wetbacks who speak  
: >no English.

: > While waiting for their car to be washed, drivers get to buy  
: >tacky car accessories like car air fresheners and bumper stickers.  
: >Many car washes also have a shoe shine service.

: >Obhamradio: Remember to remove your roof antenna before entering the  
: >car wash, so the machine won't take it off for you.

: And this has to do with making a home Ham Friendly in such a way that....  
obviously it is a reference to the fact that you need an especially tall  
garage to allow your antenna to fit inside. It also helps to build the  
garage roof of RF transparent material to provide better reception for  
your attic mounted antennas. :-)

Dan

--

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*-----*
* Daniel D. Todd      Packet: KC6UUD@WA6RDH.#nocal.ca.usa      *
*                      Internet: DDTODD@ucdavis.edu              *
*                      Snail Mail: 1750 Hanover #102             *
*                      Davis CA 95616                           *
*-----*
*      I do not speak for the University of California....      *
*      and it sure as hell doesn't speak for me!!              *
*-----*
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End of Info-Hams Digest V93 #761  
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